

MCF 3M Opener

Expand the following

i) $(3x-6)(2x+7)$

ii) $(2x+4)^2$

iii) $(x-6)(x+6)$

Feb 11-3:37 PM

MCF 3M Opener

Expand the following

i) $(3x-6)(2x+7)$
 $6x^2 + 21x - 12x - 42$
 $6x^2 + 9x - 42$

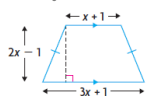
ii) $(2x+4)^2$
 $(2x+4)(2x+4)$
 $4x^2 + 8x + 8x + 16$
 $4x^2 + 16x + 16$

iii) $(x-6)(x+6)$
 $x^2 + 6x - 6x - 36$
 $= x^2 - 36$

Feb 11-3:37 PM

10. p 86

b)



$$A = h(b_1 + b_2) \div 2$$

$$A = (2x-1)(3x+1+x+1) \div 2$$

$$A = (2x-1)(4x+2) \div 2$$

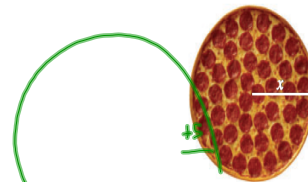
$$8x^2 + 4x - 4x - 2 \div 2$$

$$8x^2 - 2 \div 2$$

$$= 4x^2 - 1$$

Sep 22-8:27 AM

5 cm greater.
 c) How much greater is the second area? Write the difference as a simplified expression.



a) $A = \pi r^2$

b) $\pi(x+5)^2$

$$\pi(x+5)(x+5)$$

$$\pi(x^2 + 10x + 25) - \pi x^2$$

$$\pi(x^2 + 10x + 25 - x^2)$$

$$\pi(10x + 25)$$

Sep 22-8:28 AM



$$a^2 + b^2 = c^2$$

$$a^2 = c^2 - b^2$$

Proof $(n+1)^2 - n^2 = 2n+1$

$$(n+1)(n+1) - n^2 = 2n+1$$

$$n^2 + n + n + 1 - n^2 = 2n+1$$

$$2n + 1 = 2n+1$$

$$LHS = RHS$$

b) $5^2 = 2n+1$

$$25 = 2n+1$$

$$25-1 = 2n$$

$$24 = 2n$$

$$12 = n$$

Sep 19-8:41 AM

Factoring (÷)

Step 1 Common Factor

i) $3x^3 - 6x^2$
 $= 3x^2(x-2)$

ii) $2x^2y + 4x^3y^2$
 $= 2x^2y(1+2xy)$

Proof
 $2x^2y + 4x^3y^2$
 $= 2x^2y(1+2xy)$

Proof
 $2x^2y + 4x^3y^2$
 $= 2x^2y(1+2xy)$

Feb 23-10:22 AM

$$\text{ii) } 10a^2b^3 + 20a^2b - 15a^2b^2$$

$$5a^2b(2b^2 + 4 - 3b)$$

p93 & 94 q 3,6,7,11, 15 & 16

Feb 23-10:31 AM

$$3a) 4x^2 - 6x + 2$$

$$2(2x^2 - 3x + 1)$$

$$3c) [5a(a+7)] + [2(a+7)]$$

$$5a(a+7) + 2(a+7)$$

$$(a+7)(5a+2)$$

$$3d) 4m(3m-2) - 1(3m-2)$$

$$(3m-2)(4m-1)$$

Feb 18-10:00 AM

Partial
Factoring

$$9xa + 3xb + 6a + 2b$$

$$3x[3a+b] + 2[3a+b]$$

$$(3a+b)(3x+2)$$

- - - - -

$$9xa + 6a + 3xb + 2b$$

$$3a(3x+2) + b(3x+2)$$

$$(3x+2)(3a+b)$$

Sep 23-10:32 AM

Sep 23-10:50 AM